

Markus Hildinger (Customer Number 37439)
Phone: +39-333-8195052

Application Number 10/604,340

(B) Amendments to the Specification

The inventors apologize for the inconvenience to incorporate 18 amendments in the current patent application. Unfortunately, at the time of writing the patent, the author was inadvertently not aware of the requirements under 37 CFR 1.821 – 1.825.

Amendment 1:

Please insert directly after the section heading of "Description" (prior to paragraph 1):

DESCRIPTION

INCORPORATION OF SEQUENCE LISTING

A paper copy of the Sequence Listing and a computer readable form (CRF) of the sequence listing, containing the file named RNAI seq.ST25.txt, which is 79,071 bytes in size, and which was created on October 7th 2003 and last modified on July 12th, 2005, are herein incorporated by reference. The symbols and format used for nucleotide and amino acid sequence data comply with the rules set forth in 37 C.F.R. sctn.1.822.

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Markus Hildinger (Customer Number 97439)
Phone: +39-393-8195052

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Amendment 2:

Please make the following amendment to Paragraph 378 – related to sequence listing referrals:

[0375] More specifically, AAV virions were prepared and titered as described herein and in prior art [83, 104, 105]. At day 1, 10.exp.11 genomic particles of AAV 2/2 CMV luciferase – referenced in SEQ ID NO: 1 – were injected into the right tibialis muscle of 40 Balb/c mice.

Amendment 3:

Please make the following amendment to Paragraph 376 – related to sequence listing referrals:

4-Group 1 (5 animals) 10.exp.11 genomic particles of AAV2/5 U6 lucRI- 1a (referenced by SEQ ID NO: 5); Group 2 (5 animals) 10.exp.11 genomic particles of AAV 2/5 RSV lucRI-1b (referenced by SEQ ID NO: 6); Group 3 (5 animals) 10.exp.11 genomic particles of AAV 2/5 U6/U6 lucRI-2 (referenced by SEQ ID NO: 12); Group 4 (5 animals) 10.exp.11 genomic particles of AAV 2/5 U6/U6 lucRI-3 (referenced by SEQ ID NO: 7); Group 5 (5 animals) 10.exp.11 genomic particles of AAV 2/5 U6 lucRI- 4(sense) (referenced by SEQ ID NO: 8) and 10.exp.11 genomic particles of AAV 2/5 U6 lucRI-4(antisense) (referenced by SEQ ID NO: 9); Group 6 (5 animals) 10.exp.11 particles of AAV2/5 pol1 lucRI (referenced by SEQ ID NO: 11); Group 7 (5 animals) 10.exp.11 particles of AAV2/5 U6 eGFPRI-1a (referenced by SEQ ID NO: 10); Group 8 (5 animals) PBS injections

Amendment 4:

Please make the following amendment to Paragraph 379 – related to sequence listing referrals:

[0379] Thus, the luciferase-specific RNA interference vectors AAV2/5 U6 lucRI-1a (referenced by SEQ ID NO: 5), AAV2/5 U6 lucRI-1b (referenced by SEQ ID NO: 6), AAV2/5 U6/U6 lucRI-2 (referenced by SEQ ID NO: 12), AAV2/5 U6/U6 lucRI-3 (referenced by SEQ ID NO: 7), AAV2/5 pol1 lucRI (referenced by SEQ ID NO: 11) and AAV2/5 U6 lucRI-4(sense); AAV2/5 U6 lucRI-4(antisense) (referenced by SEQ ID NO: 8 and SEQ ID NO: 9, respectively) were capable of significantly decreasing luciferase expression in muscle of a mammalian subject via AAV-mediated RNAi expression cassette transfer in vivo compared to an untreated control group (group 8).

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Amendment 5:

Please make the following amendment to Paragraph 383 – related to sequence listing referrals:

At day 1, 5 times 10.exp.11 genomic particles of AAV 2/2 CMV luciferase (referenced by SEQ ID NO: 1) were administered to the lung of 15 Balb/c mice via nasal instillation.

Amendment 5:

Please make the following amendment to Paragraph 384 – related to sequence listing referrals:

3-Group 1 (5 animals) 10.exp.11 genomic particles of AAV2/5 U6 lucRI-1a (referenced by SEQ ID NO: 5); Group 2 (5 animals) 10.exp.11 particles of AAV2/5 U6 eGFPRI-1a (referenced by SEQ ID NO: 10); Group 3 (5 animals) PBS control

Amendment 6:

Please make the following amendment to Paragraph 387 – related to sequence listing referrals:

[0387] Thus, the luciferase-specific RNA interference vector AAV2/5 U6 lucRI-1a (referenced by SEQ ID NO: 5) was capable of significantly decreasing luciferase expression in lung of a mammalian subject via AAV-mediated RNAi expression cassette transfer *in vivo* compared to an untreated control group (group 3).

Amendment 7:

Please make the following amendment to Paragraph 390 – related to sequence listing referrals:

At day 1, 10.exp.12 genomic particles of AAV 2/2 CMV luciferase (referenced by SEQ ID NO: 1) were administered to the liver of 15 Balb/c mice via portal vein injection.

Amendment 8:

Please make the following amendment to Paragraph 391 – related to sequence listing referrals:

5-Group 1 (5 animals) 10.exp.12 genomic particles of AAV2/5 U6 lucRI- 1a (referenced by SEQ ID NO: 5); Group 42 (5 animals) 10.exp.12 particles of AAV2/5 U6 eGFPRI-1a (referenced by SEQ ID NO: 10); Group 3 (5 animals) PBS control

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Amendment 9:

Please make the following amendment to Paragraph 393. There was a typographical error, and the result of group 3 should read "100%", not "00%".

~~6-Group 1 48% luciferase activity (+/-9% within 95% confidence interval); Group 2 99% luciferase activity (+/-5% within 95% confidence interval); Group 3 100% luciferase activity.~~

Amendment 10:

Please make the following amendment to Paragraph 394 – related to sequence listing referrals:

~~[0394] Thus, the luciferase-specific RNA interference vector AAV2/5 U6 lucRI-1a (referenced by SEQ ID NO: 5) was capable of significantly decreasing luciferase expression in liver of a mammalian subject via AAV-mediated RNAi expression cassette transfer in vivo compared to an untreated control group (group 3).~~

Amendment 11:

Please make the following amendment to Paragraph 397 – related to sequence listing referrals:

~~At day 1, 10.exp.10 genomic particles of AAV 2/2 CMV luciferase (referenced by SEQ ID NO: 1) were administered to the brain of 15 Balb/c mice via intracranial injections.~~

Amendment 12:

Please make the following amendment to Paragraph 397 – related to sequence listing referrals:

~~7-Group 1 (5 animals) 10.exp.12 genomic particles of AAV2/5 U6 lucRI- 1a (referenced by SEQ ID NO: 5); Group 2 (5 animals) 10.exp.12 particles of AAV2/5 U6 eGFPRI-1a (referenced by SEQ ID NO: 10); Group 3 (5 animals) PBS control~~

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Amendment 13:

Please make the following amendment to Paragraph 401 – related to sequence listing referrals:

[0401] Thus, the luciferase-specific RNA interference vector AAV2/5 U6 lucRI-1a (referenced by SEQ ID NO: 5) was capable of significantly decreasing luciferase expression in brain of a mammalian subject via AAV-mediated RNAi expression cassette transfer *in vivo* compared to an untreated control group (group 3).

Amendment 14:

Please make the following amendment to Paragraph 404 – related to sequence listing referrals:

At day 1, 5.exp.9 genomic particles of AAV 2/2 CMV luciferase (referenced by SEQ ID NO: 1) were administered to the right eye of 15 Balb/c mice via intravitreal injections. At day 28, the mice received the following administrations via intravitreal injections into the same eye:

Amendment 15:

Please make the following amendment to Paragraph 405 – related to sequence listing referrals:

9-Group 1 (5 animals) 5.exp.9 genomic particles of AAV2/5 U6 lucRI-1a (referenced by SEQ ID NO: 5); Group 2 (5 animals) 5.exp.9 particles of AAV2/5 U6 eGFPRI-1a (referenced by SEQ ID NO: 10); Group 3 (5 animals) PBS control

Amendment 16:

Please make the following amendment to Paragraph 408 – related to sequence listing referrals:

[0408] Thus, the luciferase-specific RNA interference vector AAV2/5 U6 lucRI-1a (referenced by SEQ ID NO: 5) was capable of significantly decreasing luciferase expression in brain of a mammalian subject via AAV-mediated RNAi expression cassette transfer *in vivo* compared to an untreated control group (group 3).

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Amendment 17:

Please make the following amendment to Paragraph 411 – related to sequence listing referrals:

At day 1, 5.exp.9 genomic particles of AAV 2/2 U6 eGFPRI-1a (referenced by SEQ ID NO: 10) were administered to the right eye of 10 Balb/c mice via intravitreal injections. The left eyes of the same animals received 1, 5.exp.9 genomic particles of AAV 2/2 U6 luciferase-1a (referenced by SEQ ID NO: 5) via intravitreal injections and functioned as a negative control.

Amendment 18:

Please make the following amendment to Paragraph 413 – related to sequence listing referrals:

[0413] Thus, the GFP-specific RNA interference vector AAV2/2 U6 eGFPRI-1a (referenced by SEQ ID NO: 10) was capable of significantly decreasing GFP expression in the eye of a GFP transgenic mammalian subject via AAV-mediated RNAi expression cassette transfer *in vivo*.